

Application No. 09/888,727
Reply to Office Action mailed October 8, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of controlling thea flow rate of a fluid sample flowing through a microfluidic channel, the method comprising:

providing a first fluid as a flow in a microfluidic channel; and

sheathing the first fluid sample within a center region of a second fluid flowing through the microfluidic channel.

wherein:

the second fluid completely surrounds, and is in contact with, the fluid sample at an interface between the second fluid and the fluid sample;

the flow rate of the fluid sample is constant across the center region; and

the having a known viscosity, such that the first fluid has a flow rate of the fluid sample that is substantially equal to thea flow rate of the second fluid at the interface between with the secondfirst fluid and the fluid sample.

2-32. (Cancelled)

33. (New) The method of claim 1, wherein the fluid sample has an unknown or variable viscosity.

34. (New) The method of claim 1, wherein the fluid sample comprises non-dissolved particles.